

## **REMARKS AND DISCUSSION**

Upon entry of the present Amendment, claims 1-7, and 9-12 are pending in the application, of which claims 1 and 9 are independent. Claim 1 has been amended herein by incorporation of the features of claim 8, which is correspondingly canceled.

The above-identified Office Action has been reviewed, the references carefully considered, and the Examiner's comments carefully weighed. In view thereof, the present Amendment is submitted. It is contended that by the present amendment, all bases of rejection set forth in the Office Action have been traversed and overcome. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

### **Allowable Subject Matter**

In the Office Action (page 4), the Examiner has allowed claims 9-12, and has indicated that claim 8 would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

### **Applicant's Response:**

Applicant gratefully acknowledges the Examiner's allowance of claims 9-12 and indication that claim 8 includes allowable subject matter, and applicant has incorporated the features of claim 8 into claim 1 (whereby claim 1 is effectively claim 8 rewritten in independent form) pursuant to the Examiner's suggestion. Thus, applicant respectfully submits that all claims in the application, claim 1, claims 2-7 which depend from claim 1, and claims 9-12, are now in allowable form.

### **Amendments**

Again, claim 1 has been amended herein by incorporation of the features of claim 8, which is correspondingly canceled.

Applicant respectfully submits that all of such amendments are fully supported by the

original disclosure, including the drawings. Applicant also respectfully submits that the amendments do not introduce any impermissible “new matter” into the application, as all of the subject matter of these amendments was expressly or inherently disclosed in the specification as originally filed.

Still further, applicant respectfully submits that the above amendments do not raise any new issues for consideration by the Examiner, again, because they only involve incorporation of the features of claim 8 into claim 1 based on the Examiner’s indication of allowable subject matter.

#### Claim Rejections – 35 USC 112

At page 2 of the Office Action, the Examiner has rejected claims 2 and 3 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states that claim 2 recites “the detachable lid member tool is a bolt screw fitted into the opening provided in the casing.” It is the Examiner's position that “the detachable lid member tool” lacks antecedent basis, not is it clear which disclosed element corresponds to the recitation.

#### *Applicant’s Response:*

In view of the above amendment to claim 2, deleting the term “tool”, it is believed that the rejection is overcome. Accordingly, it is respectfully requested that the rejection be reconsidered and withdrawn.

#### Claim Rejections – 35 USC 103

At page 2 of the Office Action, the Examiner has rejected claims 1-7 under 35 USC 103(a) as obvious over JP 57-190903 (JP ‘903) in view of Shirey (US 4215767) for reasons similar to those applied against claim 1 in the previous Office Action. It is the Examiner’s opinion that JP ‘903 discloses an actuator comprising: a casing (10, 3, 15) having a hollow bore formed therein; a piston (6) slidably fitted into a casing (1); a lock mechanism (2) provided in the casing so as to lock in response to forward movement of the piston (6) in order to mechanically lock the piston (6) at a

forward position and unlock in response to a release control fluid pressure acting on the lock mechanism (2), the lock mechanism (2) comprising a lock piston (16) such that the release control fluid pressure can act on the lock piston (16) toward the rear and a spring (22) provided in a compressed state between the lock piston (16) and the casing so as to exhibit a spring force that urges the piston (6) to move forward; a fluid pressure source; and a fluid pressure control mechanism for controlling fluid pressure generated by the fluid pressure source so that the control fluid pressure and the release control fluid pressure can be obtained; an opening provided in a portion of the casing that the rear side of the lock piston (16) faces being closed by a separate, detachable lid member (19), a tool connection part being provided in a rear portion of the lock piston (16), and the tool connection part being provided in a rear portion of the lock piston, and the tool connection part enabling a tool (23) inserted through the opening to be detachably connected to the tool connection part, wherein the tool is configured to be inserted through the opening from the outside of the casing and connected to the tool connection part to enable manual operation of the lock piston via the tool 23. Again, however, the Examiner states that JP '903 lacks the explicit disclosure of the actuator being used in a parking brake and that Shirey discloses a similar actuator and further teaches its use in a parking brake environment. Thus, it is the Examiner's position that it would have been obvious to one of ordinary skill in the art to use the JP(57-190903) brake as a parking brake in view of the brake apparatus of Shirey. As regards claims 2-7, the Examiner states that the limitations of each of the claims is taught by the cited prior art references.

Further, at page 5 of the Office Action, the Examiner has responded to one of the arguments presented in the Amendment filed 08 January 2010. The Examiner states that, regarding the combination of JP '903 and Shirey being incompatible (and therefore the Examiner's rejection being based on hindsight), Shirey has been relied upon merely for knowledge of similar actuators in a parking brake environment. Further, the Examiner states that the rejection does not attempt to place the device of JP '903 in the brake system of Shirey. Instead, the Examiner argues that since JP '903

merely lacks disclosure of the broadly recited “parking brake system”, the actuator of JP '903 can clearly be used in a parking brake system since it is capable of being actuated and retracted. As such, the Examiner has maintained that the proposed combination is proper.

Applicant's Response

Upon careful consideration and in light of the above amendments to claim 1, applicant respectfully submits that the rejection of claims 1-7 is overcome and that these claims are now in allowable form.

Further, although claim 1 is amended to expedite allowance of the application, applicant respectfully submits that: the proposed use of the self-locking actuator of JP '903 as a parking brake actuator based on the teachings of Shirey is improperly based on hindsight which the Examiner exclusively obtains from applicant's disclosure; and neither the applied references teaches features required by the rejected claims, including a tool connection part provided in a rear portion of the locking piston, which enables a tool to be inserted through an opening provided in the casing which can be detachably connected to the tool connection part as required by claim 1, and related features of claims 2-7.

Regarding the Examiner's rebuttal pertaining to the propriety of his proposed combination of JP '903 and Shirey, applicant respectfully traverses such rebuttal because it is inconsistent with controlling law. The Examiner states that the rejection does not attempt to place the device of JP '903 in the brake system of Shirey, but that Shirey is merely used to demonstrate the use of an actuator in a parking brake environment, which would suggest to persons skilled in the art that the actuator of JP '903 is capable of being used in a parking brake system. In fact, however, relevant law requires the Examiner to consider *what the full disclosure of the reference fairly suggests to one of ordinary skill in the art*, and not to rely on only select feature(s) of a reference without regard to the context in which the reference actually uses such feature(s). MPEP 2141.02 states that “ascertaining the differences between the prior art and the claims at issue requires interpreting the claim language, and considering

both the invention and the [respective] prior art references as a whole . . . . A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention.” See *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

Here, it is indisputable that the actuator of JP ‘903 is structurally and functionally distinct from that of Shirey, e.g., Shirey relies on a second source of air pressure to lock the piston in the braked condition, whereas the actuator of JP ‘903 is automatically locked, the automotive actuator of JP ‘903 is not able to properly brake a railcar as required of Shirey’s actuator, etc. In light of the actual disclosures of the references, persons of ordinary skill in the art would not consider the proposed modification to Shirey’s railcar braking system to be obvious under 35 USC 103 because there is no reason to expect that the pneumatic cylinder of JP ‘903 would / could properly function as a parking brake in a railcar application such as disclosed by Shirey.

Regarding features of the claimed invention, applicant respectfully submits that the screw rod (23) of JP ‘903, which remains fixed to the auxiliary piston at all times, is significantly different than the present invention which includes the tool connection part at a rear portion of the lock piston and which is configured accommodate a tool inserted through an opening in the casing once the detachable lid member is removed. The screw rod (23) is subject to damage, wear-and-tear, etc. due to its permanent status as part of the pneumatic cylinder, and thus may become inoperable and/or affect the normal operation of the pneumatic cylinder, unlike the arrangement of the claimed invention.

Also, in the claimed invention, the tool connection part is formed by cutting an internal thread on a rear part of an inner face of a first communication passage formed in the locking piston. Thus, the tool connection part is formed by utilizing the first communication passage that communicates with the spring chamber, whereby machining of the tool connection part is relatively easy. See claims 4, 5. In contrast, in JP ‘903, the auxiliary piston 16 must be machined to have an axially extending bore for receiving the screw rod 23. JP ‘903 does not show or in any way suggest an idea of forming a

communication passage and utilizing such communication passage to provide a part of receiving the screw rod 23.

In view of the foregoing, applicant respectfully requests that the rejection of claims 1-7 based on JP '903 and Shirey be reconsidered and withdrawn.

### **CONCLUSION**

Based on all of the foregoing, applicant respectfully submits that all of the objections and rejections set forth in the Office Action are overcome, and that as presently presented, all of the pending claims are believed to be allowable over all of the references of record, whether considered singly or in combination. Applicant requests reconsideration and withdrawal of the rejections of record, and allowance of the pending claims.

The application is now believed to be in condition of allowance and a notice to this effect is earnestly solicited.

If the Examiner is not fully convinced of the patentability of all of the claims now in the application, the applicant respectfully requests that the Examiner telephonically contact the applicant's undersigned representative to expeditiously resolve any issues remaining in the prosecution of the application.

Entry of the present Amendment is respectfully requested under 37 CFR 1.116 on the grounds that: the Amendment does not introduce any new issues for consideration by the Examiner; the Amendment is believed to directly overcome the rejection of claim 2-3 under 35 USC 112, second paragraph; and, moreover, the Amendment is believed to place the application in condition for allowance.

Favorable consideration is respectfully requested.

Respectfully submitted,



Customer No. 21828

Carrier, Blackman & Associates, P.C.  
43440 W. 10 Mile Road  
Novi, Michigan 48375  
July 14, 2010

Joseph P. Carrier  
Attorney for Applicant  
Registration No. 31,748  
(248) 344-4422

**CERTIFICATE OF ELECTRONIC TRANSMISSION**

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office on July 14, 2010.



JPC/amc  
Enclosures